

Virginia Harmful Algal Bloom (HAB) Task Force Charter

July 2017

Mission: The mission of the Virginia HAB Task Force is to conduct monitoring and surveillance for HAB species, to respond to and investigate HAB events, utilize scientifically relevant information to advise public health and environmental resource managers, and to communicate potential health risks to the public.

These efforts are intended to prevent human exposure to HAB organisms and their toxins which may be present in Virginia marine and fresh waterbodies.

History: The Task Force was initiated in 1997 to monitor, research, and analyze the prevalence of *Pfiesteria*-like organisms and to coordinate the group's resources and activities for the future.

Present: Since its inception, the Task Force has adapted its efforts to better detect and communicate changes in marine phytoplankton communities in addition to initiating a surveillance program for freshwater cyanobacteria species. The Task Force prioritizes efforts for the detection of HAB species and toxins in waters supporting shellfish, drinking water, and public recreational uses.

Future: The HAB Task Force will continue to work collaboratively to improve: detection of HAB species and toxins, planning for HAB response, coordination during HAB investigations, and communicating HAB risk and advisories to protect human health.

Composition: The Virginia HAB Task Force is a cooperative, cohesive assemblage of the Commonwealth's natural resources, health agencies and research institutions, with supportive efforts from many other state agencies and research institutions.

Leadership: Two state agencies, the Virginia Department of Health and the Department of Environmental Quality, serve as co-leads coordinating the HAB Task Force efforts.

Roles & Responsibilities: The following five primary support member agencies/institutions are responsible for routine monitoring, surveillance, analysis, and event-based HAB response and notification:

Department of Environmental Quality (VDEQ) – serves with VDH as a co-lead for coordinating Task Force activities. DEQ responds to reports of fish kills and associated HAB events, collects HAB samples for evaluation by the research institutions and collects water quality samples during suspected HABs, and provides any findings or information to the other members of the Task Force.

Virginia Department of Health (VDH) – serves with DEQ as a co-lead for coordinating Task Force activities and includes primary support members from three VDH offices, each with specific roles and responsibilities to Task Force operations. These offices are responsible for issuing human health advisories for HABs in recreational waters, managing shellfish growing area closures, and coordinating with water treatment operators in source waters where HABs are detected at unsafe levels.

Office of Environmental Health Services - Division of Shellfish Sanitation (DSS) – is responsible for the routine collection of water and/or sediment samples from shellfish growing areas within Chesapeake Bay, its tidal tributaries, and the coastal Eastern Shore of Virginia, as well as bloom response sampling including shellfish collections if necessary. DSS conducts and/or coordinates analyses of phytoplankton and biotoxins, and may establish shellfish harvest restrictions, utilizing the methods and criteria as described by their marine biotoxin contingency plan and the National Shellfish Sanitation Program Manual of Operations.

Office of Epidemiology - Division of Environmental Epidemiology (DEE) - will coordinate with local health district staff for health surveillance and utilization of HAB health screening forms for evaluating exposure complaints. DEE monitors the HAB Hotline (888-238-6154), relays reports to other primary support members for response coordination and for follow-up when human or animal cases of possible exposure are reported, maintains the: HAB website, Algal Bloom map, HAB database, and submits human and animal exposure reports to the One Health Harmful Algal Bloom System (OHHABS) of the Center of Disease Control and Prevention (CDC).

Office of Drinking Water (ODW) - regulates 123 waterworks with surface water intakes supplying drinking water to Virginia residents. The ODW will provide technical assistance to waterworks to aid in the identification of and response to HABs. HAB occurrences identified by the ODW will be reported to the DEE.

Virginia Institute for Marine Science (VIMS) – identifies and enumerates HAB species using microscopic and molecular genetic methods on samples collected for monitoring by VIMS personnel, and those collected in response to blooms and fish or shellfish kills by VIMS and other HAB Task Force members. VIMS utilizes bioassays to assess impacts of HAB species on aquatic animal health and conducts biotoxin analyses by ELISA and/or LC-MS/MS in response to blooms, and fish or shellfish kills, as needed. VIMS is responsible for pathological analyses of finfish with lesions, and animals from fish and shellfish kill events.

Old Dominion University (Phytoplankton Laboratory) (ODU) - contributes to long-term ongoing monitoring programs in Chesapeake Bay and its tributaries, including meteorological and water quality monitoring and phytoplankton species composition analyses and the enumeration of all potentially toxic taxa through funded collaborations

with DEQ, VDH and other partners. All HAB events relating to shellfish growing areas will be coordinated with VDH:DSS in a timely manner to inform shellfish management decisions. Monitoring of freshwater blooms and associated phytoplankton analyses and toxin screenings is also conducted by ODU through funded collaborations with VDH, DEQ and others, with coordination with VDH regarding cyanobacterial toxins as it relates to management of drinking water and recreational contact.

Virginia Marine Resources Commission (VMRC) – The VMRC Law Enforcement Division may assist the DEQ in field response to fish kills or suspected HAB events when necessary. The Division maintains and enforces waterway closures related to HAB events or fish kills; this includes posting announcements of closures on the VMRC website and posting signs to alert the public of HAB events near affected waters, as needed. A designated VMRC employee attends all HAB Task Force meetings and participates on Task Force conference calls.

Each of the above primary support agencies/institutions will maintain at least two points of contact for the communication network. Implementation of the responsibilities outlined above is subject to funding availability. Specific obligations of primary support agencies may be further delineated within annual service contracts with operational plans updated on a routine basis.

Several other Virginia agencies, institutions, and stakeholders provide support during HAB events. These groups, this document, and other related Task Force information such as the Virginia HAB Response Plan, will be maintained on the Task Force website www.HarmfulAlgaeVa.com.

This agreement will be reviewed and updated as necessary or at a minimum, every 10 years to ensure the cooperation and coordination of the Task Force primary support member agency roles and participation remains active and appropriate.